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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,243	11/01/2000	Carl J. Sinfield	QMI.5802.1	2616

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EXAMINER

JIMENEZ, MARC QUEMUEL

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,243

Applicant(s)

SINFELD, CARL J.

Examiner

Marc Jimenez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of **Group II, Claims 5-8** in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an illustration of "developing three dimensional models of tire tread portions, installing sipes into the models, generating foundry castings from the siped models, and undercut ribs" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Also, fig. 1 is confusing. It is difficult to determine how the pitches shown in fig. 2 are cut out from fig. 1. Clarification is requested.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 5-8** are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for proving a vented mold (page 2, lines 10-12, ie. “venting of the mold is at the pitch line”), the specification does not reasonably provide enablement for the claimed “ventless tire mold” (claim 5, line 1). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make “a ventless tire mold”, since the mold is actually vented.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 5-8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites “installing sipes”. This limitation is unclear because it is unclear how a sipe is installed. The traditional definition in the art for sipes is a groove (see for instance 3A in figure 1 and col. 6, line 28 of US Patent 6,026,875 to Diensthuber et al.).

Therefore, it is unclear how one could install a groove.

Claim 5 recites “the siped models” in line 4 which lacks proper antecedent basis.

Claim 5 requires that the mold be a ventless tire mold, however, the mold is actually vented as noted above. Therefore, the scope of the claims is unclear.

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Claim 8 recites “receiving the sipes”. If the sipes are grooves, it is unclear how one could receive a groove. Applicant is requested to clarify the “sipes” limitations in the claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claim 5** is rejected under 35 U.S.C. 102(b) as being anticipated by Galli et al. (5,234,326).

Galli et al. teach a method for making a ventless tire mold (fig. 4), comprising: developing three dimensional models of tire tread portions and installing sipes into the models (In col. 8, lines 51-55, Galli et al. teach forming pitch profiles **10-12** utilizing a casting technique. In casting techniques, it is inherent that a mold (or a “model”) is used to form the castings and comprise the desired tread design which includes the sipes. For instance the pitch profiles **10-12** have ribs **12a** which are used to form sipes on the tire surface.), generating foundry castings (col. 8, lines 51-55) from the siped models, preparing individual pitch profiles **10-12** from the foundry castings (col. 8, lines 51-55), and assembling a mold (fig. 4) by nestingly interconnecting a plurality of the prepared individual pitch profiles **10-12**.

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10. **Claims 5-8** are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art [AAPA] (page 1, lines 16-24, page 5 to page 6, and fig. 4-5 of applicant's specification).

[AAPA] teaches developing three dimensional models of tire tread portions (page 1, lines 16-18), installing sipes into the models (page 5, lines 14-18, ie. "the sipes are placed onto the carving [model carving] at 60"), generating foundry castings from the siped models (page 1, lines 18-19 and 86 fig. 4), preparing individual pitch profiles from the foundry castings (page 5, lines 28-29), and assembling a mold by nestingly interconnecting a plurality of the prepared individual pitch profiles (120 fig. 5).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 6-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Galli et al. (5,234,326) in view of Applicant's Admitted Prior Art [AAPA] (page 1, lines 16-24 of applicant's specification).

Galli et al. teach the invention cited above with the exception of the three dimensional models being cut by a multi-axis CNC machine.

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[AAPA] teaches using a multi-axis CNC machine to cut a three dimensional model (page 1, lines 16-18) that is made of REN board, plaster, or the like.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Galli et al. with the three dimensional models being cut by a multi-axis CNC machine, in light of the teachings of [AAPA], in order to utilize an automated machining process that can create intricate designs in the model.

Note that Galli et al. teach that each tire tread portion corresponds to a pitch 10-12 and undercut ribs 12a are formed in the tire tread portions for receiving the sipes.

Contact Information

13. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to CustomerService3700@uspto.gov.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is 703-306-5965.

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The examiner can normally be reached on **Monday-Thursday and the second Friday of the bi-week, between 9am-6pm.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.


Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Petitions/Special Programs	(703) 305-9285
Terminal Disclaimers	(703) 305-8408
PCT Help Desk	(703) 305-3257

If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	http://www.uspto.gov/

MJ
May 30, 2002


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